201-15891

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05/16/2005 05:53 PM

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cc: MTC@mchsi.com, Karen Florini <KFlorini@environmentaldefense.org>, Richard Denison <rdenison@environmentaldefense.org>
bcc:
Subject: Environmental Defense comments on Chlorinated C3 Streams (CAS# 63890-96-5)

(Submitted via Internet 5/16/05 to oppt.ncic@epa.gov, hpv.chemrtk@epa.gov, / boswell.karen@epa.gov, chem.rtk@epa.gov, MTC@mchsi.com, and cehoutman@dow.com)

Environmental Defense appreciates this opportunity to submit comments on the robust summary/test plan for **Chlorinated C3 Streams (CAS# 63890-96-5)**.

The Dow Chemical Company, in response to EPA's High Production Volume (HPV) Chemical Challenge, has submitted robust summaries and a test plan describing available data for 1,2-dichloropropane as a surrogate for chemicals in the chlorinated C3 streams (CAS# 63890-96-5). According to the sponsor, the chlorinated C3 streams consist of several chlorinated 3-carbon chemicals that are produced as intermediate streams from several product lines. The test plan further describes this mixture of chemicals as consisting of 1,2-dichloropropane (~65%), an unspecified trichloropropene (~8%), 2-chloropropene (~6.5%), plus a number of chlorinated propenes none of which account for greater than 5% of the total, according to the sponsor. The sponsor proposes to use data generated for 1,2-dichloropropane (PDC) as a surrogate for all components of the mixture. (It is never specifically addressed in this submission, but PDC is apparently used as an abbreviation for 1,2-dichloropropane in the test plan.) PDC was recently evaluated as part of a recent OECD SIDS program and data submitted in response to that effort are provided as the robust summaries of this submission and described in some detail in the test plan.

Our review of the test plan and robust summaries indicates that this is an excellent submission -- for PDC. However, we would point out that if the chlorinated C3 streams are, as stated in the test plan, "produced as intermediate streams from several manufacturing product lines" it is unlikely that the contents of these streams are as well-defined as indicated in the test plan. Indeed, we note that some of the data described in the robust summaries indicate that PDC may be a minor, and in some cases, a significant component of mixtures of chlorinated compounds used as nematocides. The test plan also states that the components of this mixture "all exhibit remarkably similar toxicity profiles." While this may be true, greater than 20% of the mixture is undefined, so we have no way of knowing whether that statement is in fact true for the Chlorinated C3 Streams mixture. That is, we have no basis for knowing whether or not this mixture of chemicals contains chlorinated propanes or propenes that are not as "benign" as PDC. For example, 1,2,3-trichloropropane, a possible constituent of the chlorinated C3 streams, has been reported to be carcinogenic at multiple sites in both sexes of both rats and mice at relatively low doses (NTP Technical Report # 384).

PDC, the proposed surrogate for the chlorinated C3 streams, is a data-rich chemical, as evidenced by the extensive robust summaries drawn from a recent OECD SIDS program assessment. Our review of the robust summaries indicates that PDC is used primarily as a solvent and in the synthesis of solvents. It may also be a component of chlorinated propanes and propenes used as a nematocide and as a flame retardant. As such, it would appear that there is significant potential for occupational exposure and release into the environment. Thus, this submission for PDC should not be considered adequate for the chlorinated C3 streams, until and unless these streams are more completely defined and at least minimal comparative data are provided to demonstrate that PDC is truly representative of the contents of this mixture.

Thank you for this opportunity to comment.

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